

## Why do stormwater discharges from construction need permits?

The construction industry is a crucial participant in Monroe County's efforts to protect our streams, wetlands, ponds, bays, the Genesee River and Lake Ontario. Through the use of erosion and sediment control (ESC) practices, construction site operators are the key defense against erosion and sedimentation. As stormwater flows over a construction site, it picks up pollutants like sediment, debris, and chemicals and delivers them straight to our water resources. These pollutants degrade water quality and aquatic habitat.



### AVOID THIS NYS DEC Water Quality Violation

*Preventing soil erosion and sedimentation is an important responsibility at all construction sites.*

In addition to the environmental impact, uncontrolled erosion can have a significant financial impact on a construction project. It costs money and time to repair gullies, replace vegetation, clean sediment-clogged storm drains, replace poorly installed ESC practices, and mitigate damage to other people's property or to natural resources.

## Monroe County Soil & Water Conservation District

# Stormwater and Construction

## How Phase II Stormwater Regulations Affect the Industry



[www.thestormwatercoalition.org](http://www.thestormwatercoalition.org)

## HOW TO GAIN COMPLIANCE

### What is the Stormwater Phase II Program?

Stormwater Phase II is the latest component of the federal 1972 Clean Water Act to come into effect. The Clean Water Act is a set of laws designed to clean U.S. waters and maintain water quality. In New York, the NYS Department of Environmental Conservation (NYSDEC) implements the stormwater program.

### What is required for construction sites?

If your project will disturb more than one acre of ground, you are required to:

**1. Submit Notice of Intent (NOI) to NYSDEC to obtain a Stormwater General Permit.** You can request information that explains the permit requirements from either the Monroe County Soil & Water Conservation District, or NYSDEC. Detailed permit information can be found at the NYSDEC Stormwater homepage:

[www.dec.state.ny.us/website/dow/mainpage.htm](http://www.dec.state.ny.us/website/dow/mainpage.htm)

**2. Have a Stormwater Pollution Prevention Plan (SWPPP) and Follow it.** The SWPPP is the plan for controlling runoff and pollutants from a site during and after construction activities. The SWPPP must be implemented in order to prevent any water quality violations. Consult the most recent NYS Standards and Specifications (the Blue Book) and the NYS Stormwater Design Manual.

**3. Certify Under Penalty of Law** to follow the SWPPP. Landowner and contractors must sign a statement that they understand and agree to comply with the terms and conditions of the SWPPP.

**4. Perform Weekly Inspections.** The landowner must hire a qualified professional to perform weekly inspections of erosion and sediment control practices and after a 1/2 inch of rainfall, to determine the level of compliance to water quality standards and specifications in the SWPPP.

**5. Maintain Erosion & Sediment Control Practices** and update SWPPP regularly.

**6. Keep all SWPPP and Inspection Forms on the Construction Site in a Site Log Book** and make the information available to regulatory staff.

# Soil Erosion Prevention & Sediment Control

## Minimize the amount of exposed soil on site

- Plan the project in stages to minimize the amount of area that is bare and subject to erosion. The less soil exposed, the easier and cheaper it will be to control erosion.
- Vegetate disturbed areas with permanent or temporary seeding immediately upon reaching final grade or when ceasing activity for 21 days or more.
- Vegetate or cover top soil and subsoil stockpiles that will not be used immediately.
- Any site that disturbs more than 5 acres at once requires special permission from NYSDEC.

## Divert clean water away from disturbed soil

- Interceptors and diversions should be used to direct all water flows away from exposed areas toward stable portions of the site.

## Reduce the velocity of stormwater to reduce erosion rate

- Vegetated buffers and check dams are erosion and sediment control practices that can be used to slow down stormwater as it travels across and through the project site.
- Silt fences and other types of perimeter filters should never be used to reduce the velocity of runoff in swales or ditches.



Rock check dams slow down stormwater in swales, reducing erosion

## Protect defined channels immediately with measures adequate to handle the storm flows expected

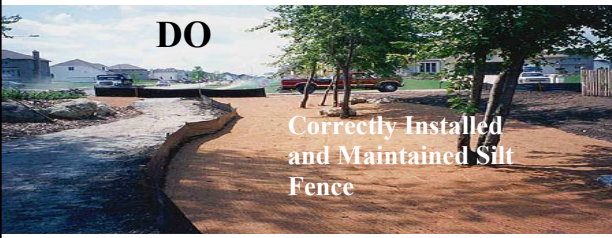
- Sod, geotextile, natural fiber, riprap, or other stabilization measures should be used to allow the channels to carry water without causing erosion.
- Use softer measures like geotextile or vegetation where possible to prevent downstream impacts.

## Keep sediment on site

- Maintain a 50-foot length of clean stone at construction site access points to accommodate large construction vehicles. Much of the dirt on the tires will fall off before the vehicle gets to the street.
- Perform regular street sweeping at the construction entrance to prevent dirt from entering storm drains.
- Do not hose paved areas.
- Sediment traps and basins are temporary structures and should be used in conjunction with other measures to reduce the amount of sediment.

## Maintain all erosion and sediment control (ESC) practices to ensure their effectiveness during the life of the project

- Regularly remove collected sediment from silt fences, berms, traps, and all other ESC practices.
- Ensure that geotextiles and mulch remain in place until vegetation is well established.
- To protect sensitive areas, use and maintain sediment control structures such as silt fences, diversion structures, and other ESC practices.



# Winter Stabilization Recommendations for Bare Soils

## Mulching Materials

- **Hay or Straw** – Air-dried; free of undesirable seeds and coarse materials

Application rates: 90-100 lbs. or 2-3 bales per 1,000 sq. ft. Two (2) tons or 100-120 bales per acre. Cover about 90% of the disturbed surface area.

Mulch anchoring method: Cut mulch into the bare soil surface with the tracks of a bulldozer with cleats at least 1” in depth.



Construction Site Stabilized with Straw Mulch

- **Wood Chips** - Chip branches, trees, bark, etc and spread over bare soils in late fall or winter.

Application: at least 1” thick to have at least a 90% cover, can be cut-in or left as is.

## Seed Mix

Seed can be applied in the late fall or in winter under the mulch so they will be ready to germinate in the spring when conditions are right for growth. Seed can also be treated with special polymers to inhibit the germination of the seed until the temperature reaches 50 to 55° F. This prevents the die-off of new tender growth.

Seed that will germinate after Oct. 1st:

- **Winter Wheat**  
Application: 3 bushels/acre
- **Winter Rye**  
Application: 3 bushels/acre
- **Aroostook Winter Rye**  
Application: 100 lbs./acre or 2 bushels/acre
- **Tall Fescue, Creeping Red Fescue, or Perennial Ryegrass**  
Application: 30 lbs./acre



Winter Wheat